FORTED" 2T:80:60

Decorrelation Filtering

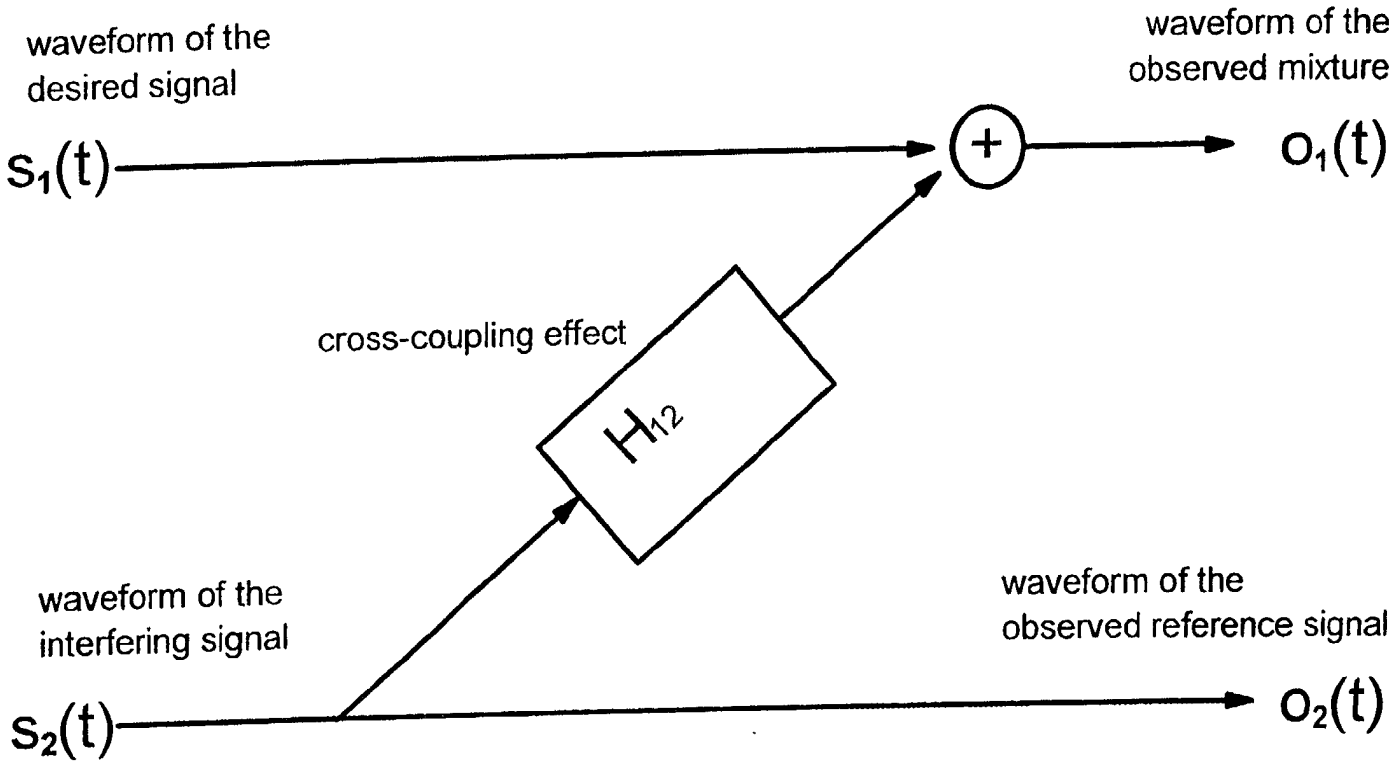

Figure 1

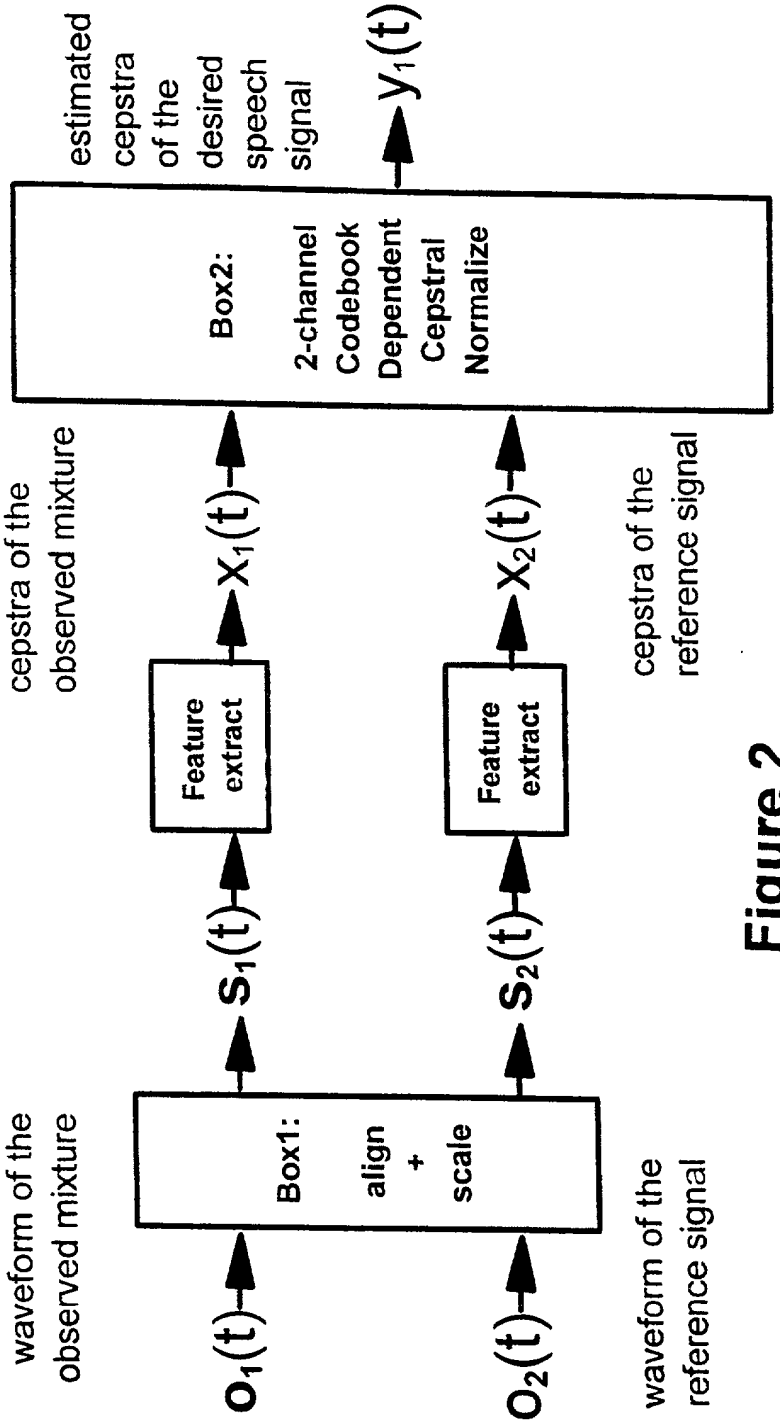
Speech recognition with 2-channel CDCN
waveform of the observed mixture
$O_1(t)$
Box1: align + scale
$S_1(t)$
Feature extract
$X_1(t)$
cepstra of the observed mixture
Box2: 2-channel Codebook Dependent Cepstral Normalize
estimated cepstra of the desired speech signal
$y_1(t)$
$O_2(t)$
waveform of the reference signal
$S_2(t)$
Feature extract
$X_2(t)$
cepstra of the reference signal

Figure 2

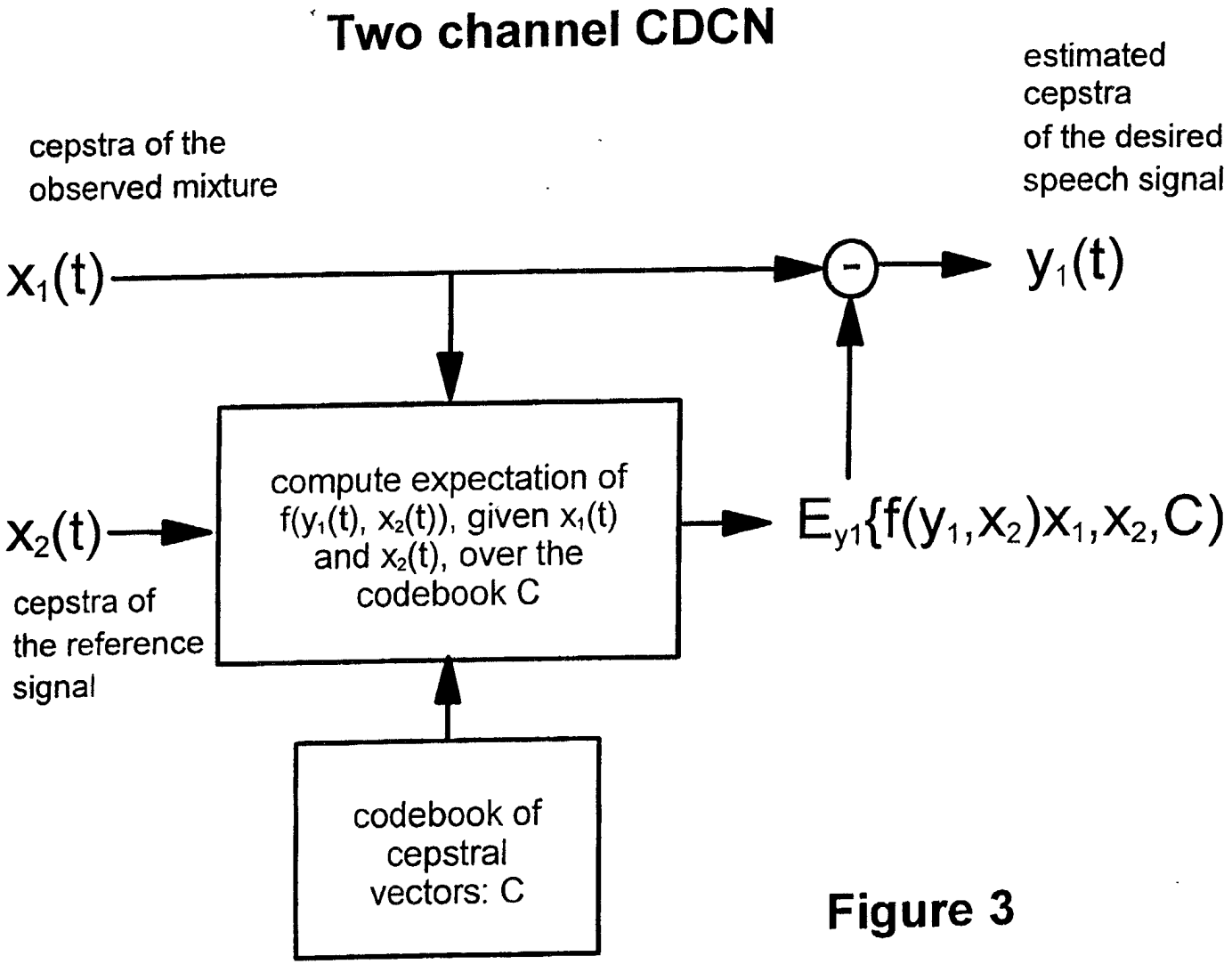
Two channel CDCN
cepstra of the observed mixture
estimated cepstra of the desired speech signal
$x_1(t)$
$y_1(t)$
$x_2(t)$
cepstra of the reference signal
compute expectation of $f(y_1(t), x_2(t))$, given $x_1(t)$ and $x_2(t)$, over the codebook C
$E_{y1}\{f(y_1,x_2)x_1,x_2,C)$
codebook of cepstral vectors: C

Figure 3